



Carbon reduction and energy cost stability for large UK manufacturing site

Words: Claire Gardner, Marketing Manager for Solis

After establishing a solid position within residential solar markets across Europe, the commercial and utility scale sector has begun to strike up quite a liking for Solis. With a robust financial position, a focus on quality and customer service, the brand is fast becoming the inverter of choice for many large-scale solar developers.



Building relationships with partners is part of the reason for the success and growth within the large-scale solar sector. Product availability, technical support, both online and on site, has been key to one such partner, Engenera.

Engenera, one of the UK's leading renewable energy companies, continues to expand its diverse portfolio with a recently completed 2MW solar project at Faerch Plast, County Durham UK. The Engenera Renewables Group provide renewable energy solutions for business owners across the UK working with them to understand their needs and objectives.

Bryan Glendinning, CEO for Engenera says 'Clients often have fragmented or unclear objectives around energy and sustainability. This could include energy savings, becoming carbon neutral and wanting to introduce a green commitment to their business. It is our job to assist them in pulling it all together to develop a solution that meets – or ideally exceeds – their objectives.'

Faerch Plast, part of the A P Moller Group produces high quality packaging for the food industry, specifically for ready meals and

food on the go. They incorporate sustainable solutions into the packaging that can reduce carbon emissions and that contribute positively to products with environmental focus. The company's strategy on sustainability is clear: to lead the industry's efforts in making food packaging circular.

The desire for solar and the drive to net zero

With multiple large manufacturing sites, Faerch have capitalised on the space available by utilising the building rooftops to deploy solar and unlock financial benefits as well as delivering against their carbon reduction strategy. The company is working towards becoming net zero and are implementing alternative energy solutions at pace to deliver on this. Additional motivation also included the fact that energy prices continue to increase putting additional pressure on businesses.

Over the last 10 years large industrial consumers have experienced the highest increase in electricity prices with up to 75% increases in some areas*. These higher tariffs, alongside costs throughout the supply chain climbing, steered them towards an energy mix that would include solar. Like

many businesses the desire to demonstrate Corporate Social Responsibility (CSR) is at the core of the Faerch strategy. Customers and end consumers are demanding more from suppliers and businesses to prove their credentials when it comes to climate change and sustainability.

'Faerch Plast have a clear and single-minded strategy regarding sustainability and wanted to utilise as much of their rooftop estate as possible. Delivering a Solar Energy Power Purchase Agreement (PPA) with them ensures they obtain energy price stability as well as moving towards hitting their carbon reduction targets,' says Glendinning.

Why Solis?

Ginlong Technologies, known globally as Solis has been operating since 2005 and as a public listed company recently published its 2020 annual results. In a year complicated by the Covid-19 pandemic the company adapted quickly to rapidly changing market requirements and as a result, reported an 83% increase in revenue for the year.

Focusing on the development and manufacture of string inverters and with a



global strategy to use technological innovation to promote continuous product development has brought many years of consistent growth.

The emphasis on product development and financial stability are what makes the company and brand attractive to solar developers and financial institutions. Alongside numerous awards for innovation and product quality, Solis is listed by leading global financial institutions such as JPMorgan

Chase and Bank of America and recognised by BloombergNEF as a bankable brand.

The project

The site in County Durham in the UK is one of several that Engenera are working on with Faerch Plast to install solar PV on their building rooftops. At 2MW and with over 4000 modules this was a substantial large scale solar project. During the decision-making process at Engenera when analysing and benchmarking equipment, there were

key criteria for the system which any chosen inverter needed to comply with:

- Financial Credibility. A PPA solar project requires detailed due diligence checks such as financial history and company stability of any prospective manufacturer partner. Warranties are of the upmost importance so it is vital to know that a company will be there to offer support in future.
- Reliability. Critical to the success of any project is having confidence in the equipment being installed and the stability of the manufacturer. Both the reliability of the product and reputation of the company behind them are key to success. Solis' track record speaks for itself.
- Grid Connectivity. As with many countries export to the grid in the UK is becoming more and more limited. A solution which was G100 compliant and could easily incorporate export power management was going to be required.
- Maximum Power Point Trackers (MPPT's). Multiple MPPT's within the inverters were seen as critical to maximise the yield from the modules, add flexibility to the design and ensure ROI is optimised. The benefit of more accurate monitoring was also considered.

Other more functional considerations such as product availability and consistency of supply were also important. Solis was chosen because of the ability to deliver against all benchmark criteria.

The result has been a successful installation and a solar plant that is now operating





efficiently and, most importantly, delivering in line with the customers objectives. Since the plant went operational, Faerch have recorded annual CO₂ savings of over 450 tonnes per annum directly attributed to the solar energy generation. Average annual savings on electricity are in the range of £85,000 or £2m+ over the lifetime of the system.

Faerch Senior Management said 'We are delighted with executing the next step in our renewables and carbon journey. Energy and environmental management are at the heart of everything we do and we are committed to improving our production processes to minimise any negative effects on our surroundings.

We are, therefore, delighted to have achieved our goal of using 100% renewable energy throughout the entire Group. Having succeeded in reducing our energy consumption by a third since 1996, all of the electricity we use now comes from renewable sources'.

Glendinning continues, saying 'Working within the plastics sector, Faerch are leading the way with their European environmental drive and carbon strategy. We are delighted that they chose Engenera to be their Solar PPA partner in the UK. We are currently modelling their second UK site and look

forward to cultivating an ongoing mutually beneficial relationship'

The Solis commercial rooftop solar solution

Designed for improved efficiency, increased yield and worry-free operation and maintenance, the 110kW is a perfect solution for this type of installation. Sandy Woodward, Solis Regional Director for Europe said, 'Designed specifically for commercial rooftop applications, the 110kW integrates our fifth-generation technology and best-in-class components to deliver an industry leading efficiency and performance. Working together with our commercial customers we can ensure that the maximum energy yield and ROI is realised.'

The launch of the new SolisCloud intelligent monitoring platform means that all installations can be tracked and partly maintained online with remote firmware updates also reducing many costly trips to site.

Looking to the future

2021 is forecast to be another great year for solar especially with the world's eyes on global leaders and their commitments to net zero targets. Solar, large scale commercial and utility in particular, are critical to the achievement of these goals. Solis is well positioned with a broad product portfolio

and local teams where you are, to support companies anywhere in the world with whatever their installation needs or sustainability goals might be.

Find out more at www.solisinverters.com.

*Source: BusinessElectricityPrices.org

Solis Fact File

Company established 2005

Stock listed since 2019

- Single Phase, No2 Global share*

- Three Phase, No4 Global share*

*source: Wood Mackenzie

BloombergNEF Endorsed

EUPD Top PV Brand award winner every year since 2016

NEW advanced technology 20GW manufacturing plant begins operation in Q2 2021

String inverters from Mini 700W to High Voltage 255kW

Local service & support in over 15 countries worldwide